

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Office of Remediation & Materials Management, Deputy Commissioner
625 Broadway, 14th Floor, Albany, New York 12233-1010
P: (518) 402-9401 | F: (518) 402-9016
www.dec.ny.gov

June 7, 2017

Terrence Clark
Superintendent
Bethpage Union Free School District
10 Cherry Avenue
Bethpage, NY 11714

Dear Superintendent Clark:

The New York State Department of Environmental Conservation (DEC) has reviewed the report "Volatile Vapor Intrusion (VVI) and Groundwater Analytical Report with Radon Testing", dated May 2017 prepared by J.C. Broderick & Associates, Inc. for the Bethpage Union Free School District.

In consultation with the New York State Department of Health and after reviewing the report, DEC has identified no immediate health concerns for students, staff or visitors to the Bethpage High School.

The report presents the findings of groundwater testing of monitoring wells and indoor air testing for radon at the Bethpage High School property at 10 Cherry Avenue. Testing of the groundwater from three locations on the school property did indicate detections reported as Radium 226/228 at concentrations ranging from 3.73 to 17.22 picocuries per liter (pCi/l). While not strictly applicable to groundwater in this case, NYS does have a standard for drinking water for total radium of 5 pCi/l. It is important to note that the school is served with water provided by the Bethpage Water District which is rigorously tested (including monitoring for radium) and free of contamination.

Testing of indoor air occurred at various locations within the school buildings. As noted in the report, the indoor air level results did not reveal elevated concentrations of radon exceeding USEPA's guidance value of 4.0 pCi/L, and they did not indicate an onsite source of radium contamination. The main source of radon within a structure is typically infiltration of radon from surrounding soil, not the underlying groundwater. It is not surprising therefore, that there is no significant radon within a structure located on property overlying groundwater with detections of radium.

The DEC has conferred with the NYS Department of Health regarding the significance of the detections of radium in the groundwater monitoring wells at the school. As the groundwater is not used for drinking and there is no other exposure to groundwater (the water is 60 feet below ground surface), there are no immediate health concerns identified for students, staff, or visitors to the school due to the presence of the



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radium. In addition, since radon levels in the school are well below the US EPA's action level of 4 pCi/L, there are no identified health concerns from radon exposure, either.

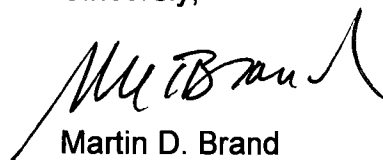
Regarding the source of the radium in the wells, the groundwater sample results by themselves cannot be used to determine whether an off-site contaminant source of radium may be impacting site groundwater or whether this is an indication of naturally occurring radium in groundwater, which had been reported in certain areas in LI. As you may know, the NYSDEC has been reviewing the nature and extent of contaminants, including radium and other emerging contaminants like 1,4-dioxane, in groundwater in the Bethpage area as part of our overall evaluation of the Navy/Grumman plume and that work will continue. We will certainly take all appropriate action necessary to protect the public health and environment as we proceed with our investigations.

While we do not believe there are any immediate health concerns related to these radium detections, out of an abundance of caution, the DEC will work with the school and consultant to take additional groundwater samples in the near future to confirm the preliminary results and to monitor the conditions. DEC has already been in contact with your consultant to determine the extent and timing of future confirmatory sampling.

Additionally, the DEC will also evaluate performing a scan with appropriate instrumentation of surface soils at select areas around the school, including lawns and playing fields, for radioactive materials to conclusively determine there are no on-site sources of radium contamination. I will be contacting you shortly to discuss the details and potential schedule for such work.

Thank you for your proactive efforts to monitor the environmental conditions at your school and for providing us this information. We look forward to working with you on the next steps in our evaluation.

Sincerely,

A handwritten signature in black ink, appearing to read "M. D. Brand", written over a horizontal line.

Martin D. Brand
Deputy Commissioner of Remediation
and Materials Management

c: Member of Assembly Lupinacci
Member of Assembly Montesano
Senator Hannon
Senator Marcellino
Supervisor Saladino, Town of Oyster Bay
Superintendent Boufis, Bethpage Water District